

# Work with GridFTP

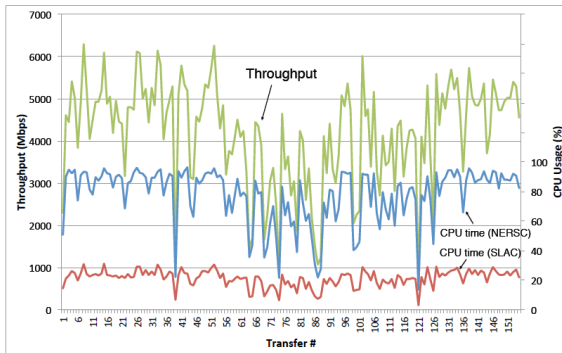
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- Implement a managed GridFTP application.
- Manage: Use PBS to control number of simultaneous processes.
- Test on ESnet's 100G testbed.





- Used DYNES FDT server to install GridFTP.
- Setup SimpleCA based security.
- Tested against ESnet IO testers.
- <http://fasterdata.es.net/performance-testing/esnet-io-testers/>.



- Using DYNES to run `globus-url-copy` against ESnet's IO testers.
- Performing a third-party transfer on ESnet's 100G testbed.
- Taking a look at transfer logs created.



With ESnet's 100G testbed, we plan to

- use DYNES to initiate third-party transfers,
- collect transfer logs,
- try different parameter settings (e.g. `-fast`, `-p`),
- repeat prior tests.

After this: Learn how to start GridFTP using PBS.



- Always something new to learn about Linux.
- Experience with certificates (SimpleCA).
- Testing on national testbed.
- Reinforcing concepts learned in lectures.
  - TCP Slow-Start.
  - Persistent connections.
  - Additional delays associated with different stages.



- A simple two-party transfer with DYNES:

```
globus-url-copy -vb -fast ftp://lbl-  
diskpt1.es.net:2811/data1/1G.dat file  
:///tmp/test.out
```

- A third-party transfer on the 100G testbed:

```
globus-url-copy -vb -fast gsiftp://nersc-  
diskpt-1/dev/zero gsiftp://anl-mempt-1/  
dev/null
```